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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 3539 (1966): Ready mixed paint, undercoating, for use under oil finishes, to Indian Standard Colours, as required [CHD 20: Paints, Varnishes and Related Products]

“ज्ञान से एक नये भारत का निर्माण”

Satyanaaranay Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”



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**IS : 3539 - 1966
(Reaffirmed 2009)**

**(Alternative to IS : 111-1950,
IS : 112-1950, IS : 113-1950,
IS : 114-1950, IS : 115-1950
and IS : 116-1950)**

Indian Standard

**SPECIFICATION FOR
READY MIXED PAINT, UNDERCOATING,
FOR USE UNDER OIL FINISHES,
TO INDIAN STANDARD COLOURS,
AS REQUIRED**

**Third Reprint NOVEMBER 1985
(Incorporating Amendment No. 1)**

UDC 667.638.4



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**INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002**

Gr 1

May 1966

AMENDMENT NO. 3 NOVEMBER 1988

TO

**IS : 3539 - 1966 SPECIFICATION FOR READY MIXED
PAINT, UNDERCOATING, FOR USE UNDER OIL
FINISHES, TO INDIAN STANDARD COLOURS,
AS REQUIRED**

(Page 2, *clause 3.1.1*) — Delete.

(CDC 8)

AMENDMENT NO. 2 JULY 1988
TO

**IS : 3539 - 1966 SPECIFICATION FOR READY MIXED
PAINT, UNDERCOATING, FOR USE UNDER
OIL FINISHES, TO INDIAN STANDARD
COLOURS, AS REQUIRED**

(*Page 2, clause 3.5*) — Delete.

[*Page 3, Table 1, Sl No. (viii)*] — Add the following new requirement after Sl No. (viii):

(1) ix)	(2) Wel opacity	(3) Between — 10 percent and + 20 percent of the approved sample	(4) 10
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(CDC 8)

IS : 3539 - 1966

(Alternative to IS : 111-1950,
IS : 112-1950, IS : 113-1950,
IS : 114-1950, IS : 115-1950
and IS : 116-1950)

Indian Standard

SPECIFICATION FOR READY MIXED PAINT, UNDERCOATING, FOR USE UNDER OIL FINISHES, TO INDIAN STANDARD COLOURS, AS REQUIRED

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 12 April 1966 as an emergency standard. After the original emergency standard had been reviewed by the Paints and Allied Products Sectional Committee and approved by the Chemical Division Council, the emergency character of the standard was removed through an Amendment in March 1968.

0.2 This standard was originally issued as IS :3539E-1966 in accordance with the simplified emergency procedures, to meet the urgent needs of the country. It was issued as an alternative to the following Indian Standards:

IS : 111-1950 Specification for ready mixed paint, brushing, undercoating, exterior, to Indian Standard colours

IS : 112-1950 Specification for ready mixed paint, spraying, undercoating, exterior, to Indian Standard colours

IS : 113-1950 Specification for ready mixed paint, brushing, undercoating, interior, to Indian Standard colours

IS : 114-1950 Specification for ready mixed paint, spraying, undercoating, interior, to Indian Standard colours

IS : 115-1950 Specification for ready mixed paint, brushing, undercoating, exterior, matt finish, to Indian Standard colours

IS : 116-1950 Specification for ready mixed paint, spraying, undercoating, exterior, matt finish, to Indian Standard colours

It was prepared with the assistance of an *ad hoc* Consultative Group composed of representatives of Ministry of Defence; Directorate General of Supplies and Disposals; Ministry of Railways; Indian Paint Association;

IS : 3539 - 1966

and other manufacturers, technologists and testing authorities under the convenership of Shri K. N. R. Sharma, Development Officer (Paints), Directorate General of Technical Development, New Delhi.

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for ready mixed paint, undercoating, with distinctive colours as required. The material is used as an undercoating for the appropriate oil finishing paint for protection and decoration of buildings. It is suitable for both interior and exterior use.

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in IS : 101-1964* and IS : 1303-1963†, shall apply.

3. REQUIREMENTS

3.1 Composition — The material shall consist of a suitable composition as to satisfy the requirements of this standard. The total volatile thinner content shall, however, not exceed 20 percent.

3.1.1 Zinc and lead pigments, gypsum and calcium sulphate shall not be used.

3.2 The material shall also comply with the requirements given in Table 1.

3.3 Water Content — If water is suspected to be present in the material, it shall not exceed 0.5 percent when tested as prescribed in 14 of IS : 101-1964*.

3.4 Weight in kg/10 Litres — The weight in kg/10 litres of this material, when tested in accordance with 25 of IS : 101-1964*, shall be within \pm 3 percent of the sample approved against this specification, if any.

3.5 Optional Requirements — In addition, if agreed to between the purchaser and the supplier, the spreading capacity, spreading time and wet opacity shall be determined in accordance with relevant methods of test as given in IS: 101-1964* and the results recorded on the sample offered for approval against the specification. In the case of supplies offered against any approved sample to this specification, these characteristics shall be within 90 percent of the approved sample.

4. PACKING AND MARKING

4.1 Packing — The material shall be packed as agreed to between the purchaser and the supplier.

*Methods of test for ready mixed paints and enamels (*second revision*).

†Glossary of terms relating to paints (*revised*).

**TABLE 1 REQUIREMENTS FOR READY MIXED PAINT, UNDERCOATING,
FOR USE UNDER OIL FINISHES, TO INDIAN STANDARD COLOURS,
AS REQUIRED**
(Clause 3.2)

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST (REF TO CL NO. IN IS : 101-1964*)
(1)	(2)	(3)	(4)
i)	Drying time: a) Surface dry b) Hard dry	Not more than 4 hours Not more than 18 hours }	7.1, 7.2 & 7.3
ii)	Consistency	Smooth and uniform and suitable for brushing or spraying as required	7.4
iii)	Finish	Smooth and matt to egg shell gloss	7.5
iv)	Colour	Close match to the specified IS colour	11
v)	Scratch hardness	No such scratch as to show the bare metal	15.1
vi)	Flexibility and adhesion after 48 hours air-drying	No visible damage or detachment of film	16
vii)	Flash point	Not below 30°C	24
viii)	Keeping properties	Not less than one year	31

*Methods of test for ready mixed paints and enamels (second revision).

4.2 Marking—The containers shall be marked with the name of the material, the manufacturer's name and trade-mark, if any; volume of the material; and the month and year of manufacture.

4.2.1 The containers may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

4.3 Other details of packing and marking shall be in accordance with the instructions given by the purchaser.

5. SAMPLING

5.1 Representative samples of the material shall be drawn as prescribed under 3 of IS : 101-1964*.

*Methods of test for ready mixed paints and enamels (second revision).

6. TEST METHODS

6.1 Tests shall be conducted according to the methods prescribed in IS : 101-1964*. References to the relevant clauses of the standard are given in 3.3 to 3.5 and in col 4 of Table 1.

6.2 Quality of Reagents — Unless specified otherwise, pure chemicals and distilled water (*see* IS : 1070-1960†) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

*Methods of test for ready mixed paints and enamels (*second revision*).
†Specification for water, distilled quality (*revised*).



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